

AMENDMENTS TO THE CLAIMS

Claims 1-17 (Cancelled).

18. (Currently Amended) A substrate processing apparatus, comprising:

a substrate holder for holding and rotating a substrate substantially horizontally;

a supply nozzle having an open end for supplying a processing liquid onto a peripheral portion of an upper surface of the substrate which is to be rotated;

a supply unit communicating with said supply nozzle for supplying the processing liquid onto the substrate via said supply nozzle;

a suction nozzle having a suction mouth configured to suck the processing liquid on the peripheral portion of the upper surface of the substrate in an upward direction, said suction mouth of said suction nozzle being located at the same radial distance from a center point of the substrate as said open end of said supply nozzle, and said suction mouth of said suction nozzle being located adjacent to said open end of said supply nozzle, said suction mouth of said suction nozzle and said open end of said supply nozzle being arranged so as to face the upper surface of the substrate;

a suction unit communicating with said suction nozzle for sucking the processing liquid from the substrate via said suction nozzle; and

~~a drive source for controlling a direction of rotation of said substrate holder so as to maximize a distance traveled by the processing liquid between being supplied onto the substrate by said supply nozzle and being sucked from the substrate by said suction nozzle during a single rotation of said substrate holder;~~

wherein said substrate holder is operable to rotate the substrate in a direction such that said suction mouth of said suction nozzle is located at a position forward of said open end of said supply nozzle with respect to a rotational direction of the substrate, and such that a distance traveled by the processing liquid supplied onto the substrate via said supply nozzle during a single rotation of said substrate holder is greater than a distance between said supply nozzle and said suction nozzle;

wherein said substrate holder is operable to rotate the substrate at a speed low enough to allow the supplied processing liquid to remain stationary on the upper surface of the substrate during rotation of the substrate.

19. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said drive source and said substrate holder are operable to rotate the substrate at a speed of not more than 500 min^{-1} .

20. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said drive source and said substrate holder are operable to rotate the substrate at a speed in a range of 5 min^{-1} to 200 min^{-1} .

21. (Previously Presented) The substrate processing apparatus according to claim 18, wherein a distance between said open end of said supply nozzle and the upper surface of the substrate is not more than 5 mm.

22. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said supply unit is operable to supply processing liquid to the substrate via said supply nozzle such that a flow rate of the processing liquid supplied through said open end of said supply nozzle is not more than 100 ml/min.

23. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said supply nozzle and said suction nozzle are adjacent to each other.

24. (Previously Presented) The substrate processing apparatus according to claim 18, further comprising a gas liquid separator coupled to said suction nozzle for separating the sucked processing liquid from a gas.

25. (Previously Presented) The substrate processing apparatus according to claim 24, further comprising
a recovery unit for recovering the processing liquid which has been separated by said gas liquid separator, and to supply the recovered processing liquid to said supply nozzle.

26. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said supply nozzle comprises a first supply nozzle having said open end, further comprising a second supply nozzle having an open end;

wherein said suction nozzle comprises a first suction nozzle having said suction mouth, further comprising a second suction nozzle having a suction mouth;

wherein said first supply nozzle and said second supply nozzle are arranged symmetrically about the center point of the substrate; and

wherein said first suction nozzle and said second suction nozzle are arranged symmetrically about the center point of the substrate.

27. (Previously Presented) The substrate processing apparatus according to claim 26, wherein said first supply nozzle and said second suction nozzle are adjacent to each other; and

wherein said second supply nozzle and said first suction nozzle are adjacent to each other.

28. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said supply nozzle comprises a first supply nozzle having said open end, further comprising a second supply nozzle having an open end, said second supply nozzle being arranged so as to extend in a direction perpendicular to a direction of extension of said first supply nozzle, and arranged so that said open end of said second supply nozzle faces a peripheral edge of the substrate.

Claim 29 (Cancelled).

30. (Previously Presented) The substrate processing apparatus according to claim 18, wherein said supply nozzle, said suction nozzle, and said substrate holder are arranged such that a travel distance of a reference point located on the peripheral portion of the upper surface of the substrate to be rotated by said substrate holder is greater when traveling from a location at which the reference point is located adjacent to said open end of said supply nozzle to a location at which the reference point is located adjacent to said suction mouth than a travel distance of the reference point when traveling from a location at which the reference point is located adjacent to said suction mouth of said suction nozzle to a location at which the reference point is located adjacent to said open end of said supply nozzle.

31. (Previously Presented) The substrate processing apparatus according to claim 18, wherein each of said supply nozzle and said suction nozzle comprises a tube arranged orthogonally with respect to the upper surface of the substrate.